

ROUND 11 CAPITAL PROJECT NOMINATION FORM
LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS
APPENDIX K

Project Name:	Area Wide Conservation Planning	EIP Number: <i>(Required)</i>	16, 10184
Federal Agency Sponsor: <i>(Required)</i>	USDA-NRCS	Contact:	Woody Loftis
Threshold:	Water Quality, Vegetation	Phone Number:	(530) 543-1501
Threshold Standard:	WQ4-A, WQ5, V1	Email:	william.loftis@ca.usda.gov
FUNDING REQUESTED IN THIS ROUND:		\$ 1,664,706	

Federal Share EIP Consideration

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. **Projects must meet one or more of these 5 items.**

- 1. Does the project involve federal land?**

Yes No

If yes, is the federal land involved important to successful implementation of the project?

☐ ☒

This project only includes federal land by coordination and the incidental benefits of treatment of adjacent private lands.

- 2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the projects contribution to the EIP program.**

Yes No

☒ ☐

- 3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species?**

Yes No

☒ ☐

Depending on location of Areawide Conservation Planning efforts and species present, species of special interest could be present.

- 4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? If yes, identify the species?**

Yes No

☒ ☐

The Areawide Conservation Plan will identify and steps will be taken to eradicate terrestrial invasive species. Primary species are identified and prioritized by the Lake Tahoe Basin Weed Coordinating Group.

- 5. Does the project contribute to supporting implementation of capital projects in the EIP? Such projects that fulfill this function would include technical assistance, data management, and/or resource inventories?**

Yes No

☒ ☐

This project provides all three by providing technical assistance to basin landowners, collecting and maintaining data relative to BMPs and Noxious weeds, and provides estimates of soil loss prevention as a result of implementation.

Check all Capital Focus Area(s) that apply:

- ☒ 1. **Watershed and Habitat Improvement**
- ☒ 2. **Forest Health**
- ☒ 3. **Air Quality and Transportation**
- ☐ 4. **Recreation and Scenic**

Check all that apply (must meet a minimum of one category):

- ☒ 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- ☒ 2. **Continued implementation of projects approved in Rounds 5 through 10 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 10.**

List Rounds and funding:

Round 9 - \$150,000

- ☒ 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). *NOTE: If “yes”, then please respond to questions in the accomplishments section of the nomination proposal.***
- ☐ 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

Project Nomination Proposal Outline

Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)

- Summarize ONLY this Round 11 project.

Implement Areawide Conservation Planning in key areas in California and Nevada (propose one in each of the following Washoe, Douglas, Placer and El Dorado) to facilitate and provide for enhanced delivery of Environmental Improvement Projects (EIP) and implementation of the TMDL within watershed boundaries. Create stakeholder groups in each watershed, develop targets of opportunity in relation to EIP process and provide design and implementation support to the jurisdictions within the watershed. Address inter-related natural resource issues such as soil and water conservation, stormwater runoff, native and invasive species management, fuels reduction through creation of defensible space, water conservation and drinking water protection at a watershed level to enable residents and agencies to collaborate on strategies, solutions, and EIP implementation. This project targets outreach and coordination efforts at the watershed scale, as well as providing technical assistance to developed single-family residential property owners on the design and installation of retrofit BMP's targeting pollutants in stormwater runoff.

Project Description

Introduction

- Provide project background which explains the situation and state the problem and how it will be addressed.

***Note:** Focus needs to be the project in Round 11 not a history of an ongoing project or program.*

Areawide Conservation Planning to facilitate conservation planning in support of EIP and TMDL implementation within key watersheds in California and Nevada. While the primary focus will be to target completion of TMDL-driven goals, the full range of inter-related resource concerns present in those watersheds will be addressed to gain maximum cumulative environmental benefits.

Currently, specific Environmental Improvement Program (EIP) projects such as BMP Retrofit, local erosion control projects, and stream channel restoration work are delivered on a basis of land ownership. Each property owner is responsible for independently delivering their “share” of EIP projects. This approach misses opportunities for collaboration among adjacent interests to work cooperatively to achieve mutually beneficial results. On the other extreme, the broader scale of watershed planning is typically completed for the entire Lake Tahoe Basin, as in the TMDL process. The broad planning approach does not identify opportunities linked to the distinctive nature and composition of individual communities and natural resources found within a watershed. There is a need to conduct planning and facilitate TMDL implementation at a watershed scale to effectively deliver environmental improvements specific to watersheds and their communities.

This watershed-focus approach provides a greater opportunity to foster community participation in support of EIP/TMDL project implementation. Through targeted outreach efforts, citizens are encouraged to play a central and substantive role in the stewardship of the watershed in which they live, and to take action to complete projects where they are integral to resource management success such as BMP Retrofit projects, fire defensible space, and controlling the spread of noxious weeds. Watershed scale emphasis will also provide for a greater ability to effectively coordinate among agencies for accelerated attainment of environmental thresholds and strategically contribute to the reduction of source category pollutant loads. Targeted watersheds will be selected based on priorities from, the science community, the regulatory community, and the implementing jurisdictions, on an appropriate scale to match available resources and permit effective collaboration, interest of communities in participating, and a mixture of proposed EIP projects and TMDL implementation opportunities that will benefit from enhanced coordination efforts.

- Describe what Round 11 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous and future projects, and identify other round funding.

NOTE: Focus should be on finishing current/phased projects. If project is new in Round 11, clearly identify if the project is for planning or implementation and how it will be completed with Round 11 funds. Identify if Round 12 or other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 11 project and the source of those funds.

The Areawide Conservation Planning approach has direct linkage to past programmatic activities as developed through the Backyard Conservation Program. The implementation of conservation planning objectives will be an extension of past efforts that have been made to raise environmental awareness and to increase public participation and agency collaboration. Round 11 funding is requested to cover a 2 year period to complete watershed planning in 4 watersheds (2 in California and 2 in Nevada), delivery of conservation objectives including BMP Retrofit plans in coordination with fire defensible space, and reporting to demonstrate the value and accomplishments of utilizing areawide conservation planning. While support will target selected watersheds, a minimum of 25% of the project will support basin wide requests for providing assistance for the tasks mentioned above.

Round 9 funding is for areawide conservation planning in other identified watersheds. These watersheds are separate from additional 4 watersheds identified for Round 11.

This project is scalable and Round 11 could fund 350 integrated site plans, 400 technical assists and 2 watershed plans (one in Nevada and one in California) over a one year period.

NRCS does anticipate requesting funding for additional watersheds and associated planning from round 12 (approximately \$1.6 million).

- Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc)

Project would be ready to implement beginning in 2010 – FY 2011. Technical support and infrastructure is in place and the *Backyard Conservation Program* is currently utilized to deliver outreach and education efforts targeting specific conservation issues.

- Describe partnerships for this project. (if applicable, project should identify committed/secured partner funding and/or other partner contributions (describe) and how it is integrated into the project)

Technical assistance on conservation issues is provided to private landowners within the Tahoe Basin through the “Backyard Conservation Program”, a partnership effort with the Nevada Tahoe Conservation District, the Tahoe Resource Conservation District and NRCS. An MOU outlines responsibilities among these 3 agencies and TRPA for the BMP Retrofit Program. Cooperative Extension in Nevada and California supports some educational aspects of the program. The community orientation of this project would increase partnership efforts with local fire districts, the Firesafe Council, public utilities, other Federal and State agencies and active coordination with local jurisdictions to effectively deliver outreach and education programs, effectively utilize resources, and facilitate collaboration in developing specific solutions to water quality problems within the geographic areas of interest.

Note: The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.

Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)

The Goal – Purpose and Need of Area Wide Conservation Planning is multi faceted. The first and perhaps dominant role of Area Wide Conservation Planning in the Tahoe Basin is the coordination and integration of threshold related activities within an area. As an example, treating cheat grass on Forest Service lots but not on the adjacent private lots or nonfederal public lands would not be as effective. Secondly, landowners are faced with satisfying different and sometimes conflicting threshold needs on their property. An example here is fire defensible space and best management practices. Another benefit of Area Wide Planning would be to create a study area for scientists to focus their effort. The benefits of a single random BMP are difficult to measure but the combined BMP's in an area would allow some measure of pollutant/storm water volume reduction. This would provide a strong connection to the TMDL and the Pollutant Load Reduction Model. Due to the focused nature, it is hoped that this planning effort will trigger action on other stakeholders in the basin. In the reciprocal, the area chosen will be based on where efforts are being focused.

In summary the Goal – Purpose and Need:

- Coordination and improved efficiency and effectiveness of conservation efforts
- Create opportunities for better quantification of project and scientific evaluation which could provide data for the TMDL and PLRM
- Increase participation in conservation efforts by area landowners/stakeholders

Objectives (specific measurable statements of action which when completed will move towards achieving the goal)

Note: Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

Fulfilling the objectives of a minimum of 700 integrated plans will provide an estimated 819 tons of soil loss prevention per year. Technical assistance to an additional 800 private property landowners has the potential to provide significant prevention of soil erosion.

The TMDL pollutant load reduction objectives are primarily focused on reducing fine sediment discharges in the urban upland land use. This land use is comprised primarily of residences, businesses and secondary roads. The US Army Corps of Engineers and Lahontan Regional Water Quality Control Board Report “*Methodology to Estimate Pollutant Load Reductions in Lake Tahoe*” identified that increases in residential BMP compliance, increased sanding management oversight and increased stormwater treatment are all part of the solution.

Vegetation thresholds were developed to increase plant diversity in forests, preserve uncommon plant communities, enhance late seral forests and reduce forest fuels, and maintain minimum populations of sensitive plants. The treatment of noxious weed populations achieves vegetation thresholds by increasing native plant communities, reversing habitat degradation and reducing fire hazard.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

Failure of the project would result in a status quo situation for EIP / TMDL implementation in the selected watersheds; while there is no anticipated negative impact from project failure, the expected positive net benefit would not be attained.

Accomplishments

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project)

Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.

Produce a minimum of 700 integrated plans and provide technical assistance to an additional 800 private property landowners addressing Best Management Practices, fire defensible space, water conservation and drinking water protection, invasive and noxious weeds, and other pertinent resource issues with a community focus. Facilitate the implementation of these integrated plans through the *Backyard Conservation Program*. Identify watershed stakeholders and encourage their participation in the identification, location, and design of community scale restoration efforts, targeting EIP and TMDL implementation. Provide the opportunity to scope projects that are planned. Increase opportunities for partnerships and collective planning for EIP and TMDL implementation. Provide coordinated outreach and education efforts within communities to avoid duplication and conflicting messages, and make the best use of available resources. Allow for greater coordination and application of scientific information specific to the watershed areas.

Project implementation in initial four sub-watershed areas will also allow project team to directly transfer practices, methodology, lessons learned, etc to other key watersheds in the Tahoe Basin. Direct project effects/benefits include source control, assisting jurisdictions in meeting environmental standards, enhancement of natural/pre-development hydrologic cycle. Secondary effects/benefits include increased understanding and awareness of local environmental issues amongst community members, ability to transfer technology across sub-watersheds.

This project is scalable and Round 11 could fund 350 integrated site plans, 400 tech assists and 2 watershed plans (one in Nevada and one in California) over a one year period.

- Describe how the project results/accomplishments will be communicated and made available to the public.

Completed watershed plans and associated planning materials and education products will be made available on District websites and through public meetings to discuss findings and alternatives.

An education and outreach program is in place and is delivered through the *Backyard Conservation Program*. Materials have been developed to explain the rationale for the program, and demonstration sites and workshops are utilized as teaching tools. Other components of outreach and education include media articles or segments, internet, one-on-one contacts with landowners, Tip Sheets explaining practices, and school projects. TRPA survey data from Pathway efforts will be used to target audiences with specific education messages and use communication methods that have proven to be effective. Numerous types of information will be provided to watershed stakeholders, agencies and local jurisdictions including:

- GIS generated maps of communities and watersheds
- land use locations and pollutant loading information
- EIP project locations

data specific to BMP's/fire defensible space/water conservation, and other important conservation issues.

- If you checked “yes” for the project being consistent with and contributes to TMDL pollutant reductions please consider and integrate the following in the project description:

a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

Area Wide Conservation Planning is intended to provide opportunities for the research and development of improved BMP's through the application of knowledge gained over the past 5 years as well as adding the dynamic of the TMDL. This will be accomplished by the integration of the science community, better coordination across property ownerships, and an increased emphasis on maintenance components of BMP's.

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

This project does not include direct project level monitoring, however, as described in Goal – Purpose and Need above this project is intended to create monitoring opportunities for the scientific community. The science community has shown significant interest in this project for those opportunities it provides. A portion of the project will focus on the collaboration with the science community.

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

This project will create integrated site plans for individual properties and an “area” plan for the larger area. These plans will identify needs for Best Management Practices, identify and eradicate infestations of noxious weeds, and provide coordination with other agencies for fire defensible space, wildlife, recreation, transportation and scenic resources. The project will also include a prediction of storm water volume and sediment reduction as a result of the implementation of the individual site plans.

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

It is hoped that this project will provide the opportunity to study the ability of best management practices to trap fine sediment and attenuate storm water volumes. This could then inform the TMDL and other tools such as the Pollutant Load Reduction Model.

Monitoring

- Describe the project monitoring that will be implemented as part of this project including:
 - List the questions the monitoring program is designed to answer.

This project lends itself to fit into a larger context of science and research in the Basin. The urban lands will be a focus of TMDL implementation, and this requires understanding of the connectivity between developed and undeveloped land uses within watersheds. Various models being developed and employed to estimate load reductions could be used by researchers to test and report on the effectiveness of a watershed approach to EIP/TMDL implementation. There are ample opportunities to collect data on applied BMP practices that would prove useful in continually improving the program. Data collected may support broader modeling efforts to improve long-term effectiveness of BMP's. These opportunities need to be identified as additional efforts in science and research are funded; we expect to work in a cooperative effort with the science community on these issues.

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

Meetings have been held with various members of the science community. These meetings have focused on how this project can provide assistance to the scientist and their research needs. As an example, it is difficult to measure the downstream effects of a single BMP, but easier to see the effects of an area installation of many BMP's. This project will benefit the research needs of the Tahoe Basin by coordinating efforts and providing a "laboratory" for the science community. One proposal for Round 10 science money has been proposed to tie in with Area Wide Conservation Planning (rd9 capital). It is hoped that Area Wide Conservation Planning will be continued in Round 11 to provide further opportunities for research.

- Describe the methods and strategies (i.e. monitoring, research, or both) that will be used to verify whether the project goals and objectives have been met? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

One of the project goals is to improve the implementation rate of Best Management Practices. Implementation rate can be determined based on the issuance of BMP Certificates of Completion.

Performance measures may include:

1) Assess effectiveness of treatment applications in select sub-watersheds representative of the various physical constraints associated within the sub-watersheds in relation to flow, sediment capture and volume. This information can be integrated with the scientific, regulatory and local jurisdictional communities for purposes of the TMDL and TMDL implementation strategies such as the Pollutant Load Reduction Model and the Lake Tahoe Clarity Crediting Program. Demonstration sites will be selected within the sub-watersheds that will show the effectiveness of BMP implementation.

2) Total area of square footage that is restored with Best Management Practices as well as the total number of properties that receive a Certificate of Completion from the Tahoe Regional Planning Agency.

3) Performance measures related to fire defensible space will be evaluated by the number of properties that are treated for fuels reduction, the number of community members participating in the process, as well as the number of new fire safe chapters that are established through outreach and education activities.

- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

This project fits into a larger monitoring program by providing opportunities for research. One of the current challenges is determining the effectiveness of best management practices. This project intends to provide opportunities to answer this question.

This project will also provide information relevant to EIP #'s 10109 (BMP EFFECTIVENESS) and 10111 (LOADING RATES FROM STORMWATER RUNOFF). As mentioned in #1 of Methods and Strategies above.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

Information provided from research will be used to improve the designs of Best Management Practices, improve the integration of fire defensible space, noxious weed control, and improve the delivery and implementation of Best Management Practices.

Attachments

- If applicable, include 8 ½ X 11 map depicting the project

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	Area Wide Conservation Planning	Agency:	USDA-NRCS
Prepared by:	Woody Loftis	Phone:	(530) 543-1501 ext.104
SNPLMA Project #:		EIP #:	16, 10184

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ 16,000	1 %
2. FWS Consultation – Endangered Species Act	\$	%
3. Direct Labor (Payroll) to Perform the Project	\$ 220,000	13 %
4. Project Equipment (tools, software, specialized equipment, etc.)	\$ 30,000	2 %
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ 10,000	1 %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ 5,000	<1 %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ 1,050,000	63 %
8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)	\$ 84,000	5 %
9. Other Necessary Expenses (see Appendix B-9)	\$ 249,706	15 %
TOTAL:	\$ 1,664,706	100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
700 Integrated site plans	12/31/2012
800 Technical assists	12/31/2012
4 Area Wide Conservation Plans	12/31/2012
Final Completion Date: 12/31/2012	

COMMENTS: